UNITED STATES
ENVIRONMENTAL PROTECTION AGENCY
REGION 6

IN THE MATTER OF: Union Pacific Railroad Company Houston Wood Preserving Works Site Union Pacific Railroad Company, Respondent Proceeding Under Sections 104, 107, and 122 of the Comprehensive Environmental Response, Compensation, and Liability Act, 42 U.S.C. §§ 9604, 9607 and 9622)	)	CERCLA Docket No. 06-02-23 ADMINISTRATIVE SETTLEMENT AGREEMENT AND ORDER ON CONSENT FOR REMOVAL ACTION SITE EVALUATION

ADMINISTRATIVE SETTLEMENT AGREEMENT AND ORDER ON CONSENT FOR REMOVAL ACTION SITE EVALUATION

TABLE OF CONTENTS

I. JURISDICTION AND GENERAL PROVISIONS

1. This Administrative Settlement Agreement and Order on Consent ("Settlement") is entered into voluntarily by the United States Environmental Protection Agency (EPA) and the Union Pacific Railroad Company ("Respondent"). This Settlement provides for the performance of a removal action by Respondent and the payment of Future Response Costs as defined in Paragraph 8 incurred by the United States at or in connection with the Union Pacific Railroad Company Houston Wood Preserving Works Site (the "Site") generally located at 4910 Liberty Road, Houston, Texas, and within the Greater Fifth Ward neighborhood and just south of the Kashmere Gardens neighborhood.

2. This Settlement is issued under the authority vested in the President of the United States by Sections 104, 107, and 122 of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980, 42 U.S.C. §§ 9604, 9607 and 9622 (CERCLA). This authority was delegated to the Administrator of EPA on January 23, 1987, by Executive Order 12580, 52 Fed. Reg. 2923 (Jan. 29, 1987), and further delegated to Regional Administrators by EPA Delegation Nos. 14-14-C (Administrative Actions Through Consent Orders, January 18, 2017) and 14-14-D (Cost Recovery Non-Judicial Agreements and Administrative Consent Orders, January 18, 2017). These authorities were previously redelegated by the Regional Administrator of EPA Region 6 on January 17, 2017, to the Superfund Division Director by EPA Region 6 Delegation Nos. R6-14-14-C (Administrative Actions Through Consent Orders) and R6-14-14-D. Pursuant to the April 17, 2019, Region 6 Realignment: General Delegation Memo (General Delegation Memo), the Regional Administrator delegated these authorities to the successor Division Director or Office Director in accordance with the Region 6 2019 reorganization, to wit: the Superfund and Emergency Management Division of EPA, Region 6.

3. EPA has notified the State of Texas (the "State"), acting by and through the Texas Commission on Environmental Quality ("TCEQ"), of this action.

4. EPA and Respondent recognize that this Settlement has been negotiated in good faith and that the actions undertaken by Respondent in accordance with this Settlement do not constitute an admission of any liability. Respondent does not admit and retains the right to controvert in any subsequent proceedings other than proceedings to implement or enforce this Settlement, the validity of the findings of fact, conclusions of law, and determinations in Sections IV (Findings of Fact) and V (Conclusions of Law and Determinations) of this Settlement. Respondent agrees to comply with and be bound by the terms of this Settlement and further agrees that it will not contest the basis or validity of this Settlement or its terms.

II. PARTIES BOUND

5. This Settlement is binding upon EPA and upon Respondent and its heirs, successors, and assigns. Any change in ownership or corporate status of Respondent including, but not limited to, any transfer of assets or real or personal property shall not alter Respondent's responsibilities under this Settlement.

6. The undersigned representative of Respondent certifies that he or she is fully authorized to enter into the terms and conditions of this Settlement and to execute and legally bind Respondent to this Settlement.

7. Respondent shall provide a copy of this Settlement to each contractor hired to perform the Work required by this Settlement and to each person representing Respondent with respect to the Site or the Work, and shall condition all contracts entered into hereunder upon performance of the Work in conformity with the terms of this Settlement. Respondent or its contractors shall provide written notice of the Settlement to all subcontractors hired to perform any portion of the Work required by this Settlement. Respondent shall nonetheless be responsible for ensuring that its contractors and subcontractors perform the Work in accordance with the terms of this Settlement.

III. DEFINITIONS

8. Unless otherwise expressly provided in this Settlement, terms used in this Settlement that are defined in CERCLA or in regulations promulgated under CERCLA shall have the meaning assigned to them in CERCLA or in such regulations. Whenever terms listed below are used in this Settlement or its attached appendices, the following definitions shall apply:

"CERCLA" shall mean the Comprehensive Environmental Response, Compensation, and Liability Act, 42 U.S.C. §§ 9601-9675.

"Day" or "day" shall mean a calendar day. In computing any period of time under this Settlement, where the last day would fall on a Saturday, Sunday, or federal or state holiday, the period shall run until the close of business of the next working day.

"Effective Date" shall mean the effective date of this Settlement as provided in Section XXV.

"EPA" shall mean the United States Environmental Protection Agency and its successor departments, agencies, or instrumentalities.

"Fund" shall mean the Hazardous Substance Superfund established by the Internal Revenue Code, 26 U.S.C. § 9507.

"Future Response Costs" shall mean all costs (including direct, indirect, payroll, contractor, travel and laboratory costs) that the United States pays after the Effective Date in implementing, overseeing, or enforcing this Settlement, including: (i) in developing, reviewing and approving deliverables generated under this Settlement; (ii) in overseeing Respondent's performance of the Work; (iii) in implementing community involvement activities under Paragraph 22; (iv) in assisting or taking action to obtain access or use restrictions under Paragraph 33; (v) in taking action under Paragraph 41 ("Access to Financial Assurance"); (vi) in taking response action described in Paragraph 31 because of Respondent's failure to take emergency action under Paragraph 24; (vii) in implementing a Work Takeover under Paragraph 31; and (viii) in enforcing this Settlement, including all costs paid under Section XIV ("Dispute Resolution") and all litigation costs. Future Response Costs shall also include all Interest on EPA's unreimbursed costs.

"Including" or "including" means "including but not limited to."

"Interest" shall mean interest at the rate specified for interest on investments of the EPA Hazardous Substance Superfund established by 26 U.S.C. § 9507, compounded annually on October 1 of each year, in accordance with 42 U.S.C. § 9607(a). The applicable rate of interest shall be the rate in effect at the time the interest accrues. The rate of interest is subject to change on October 1 of each

year. As of the date EPA signs this Settlement, rates are available online at https://www.epa.gov/superfund/superfund-interest-rates.

"National Contingency Plan" or "NCP" shall mean the National Oil and Hazardous Substances Pollution Contingency Plan promulgated pursuant to Section 105 of CERCLA, 42 U.S.C. § 9605, codified at 40 C.F.R. Part 300, and any amendments thereto.

"Paragraph" shall mean a portion of this Settlement identified by an Arabic numeral or an upper or lower case letter.

"Parties" shall mean EPA and Respondent.

"Post-Removal Site Control" shall mean actions necessary to ensure the effectiveness and integrity of the removal action to be performed pursuant to this Settlement consistent with Sections 300.415(l) and 300.5 of the NCP and "Policy on Management of Post-Removal Site Control" (OSWER Directive No. 9360.2-02, Dec. 3, 1990).

"RCRA" shall mean the Solid Waste Disposal Act, 42 U.S.C. §§ 6901-6992 (also known as the Resource Conservation and Recovery Act).

"Removal Action" means the removal action required under this Settlement.

"Respondent" shall mean Union Pacific Railroad Company.

"Section" shall mean a portion of this Settlement identified by a Roman numeral.

"Settlement" shall mean this Administrative Settlement Agreement and Order on Consent and all appendices attached hereto, and all deliverables approved under and hereby incorporated into this Settlement. In the event of conflict between this Settlement and any appendix or deliverable, this Settlement shall control.

"Site" shall mean the Union Pacific Railroad Company Houston Wood Preserving Works Site, generally located at 4910 Liberty Road, Houston, Harris County, Texas, and within the Greater Fifth Ward neighborhood, and near the Denver Harbor, and Kashmere Gardens neighborhoods, and depicted generally on the map attached as Appendix B. The Site includes the Englewood Intermodal Yard facility south of the UPRR wood preserving facility, separated by the UPRR mainline rail.

"Union Pacific Railroad Company Houston Wood Preserving Works Site Special Account" shall mean the special account within the EPA Hazardous Substance Superfund, established for the Site by EPA pursuant to Section 122(b)(3) of CERCLA, 42 U.S.C. § 9622(b)(3).

"State" shall mean the State of Texas.

"Statement of Work" or "SOW" shall mean the document describing the activities Respondent must perform to implement the removal action pursuant to this Settlement, as set forth in Appendix C, and any modifications made thereto in accordance with this Settlement.

"Transfer" shall mean to sell, assign, convey, lease, mortgage, or grant a security interest in, or where used as a noun, a sale, assignment, conveyance, or other disposition of any interest by operation of law or otherwise.

"United States" shall mean the United States of America and each department, agency, and instrumentality of the United States, including EPA.

"Waste Material" shall mean (a) any "hazardous substance" under Section 101(14) of CERCLA, 42 U.S.C. § 9601(14); (b) any pollutant or contaminant under Section 101(33) of CERCLA, 42 U.S.C. § 9601(33); (c) any "solid waste" under Section 1004(27) of RCRA, 42 U.S.C. § 6903(27), or Section 361.003 of the Texas Solid Waste Disposal Act, Tex. Health & Safety Code § 361.003.

"Work" shall mean all obligations Respondent under Section VII ("Coordination and Supervision" through Section XI ("Indemnification and Insurance").

IV. FINDINGS OF FACT

9.1. The findings of facts for this Site as defined above, are as provided below:

a. The Union Pacific Railroad Company ("UPRR") Houston Wood Preserving Works facility is located at 4910 Liberty Road, and includes approximately 125 acres located in a primarily industrial and residential area in Houston, Harris County, Texas, near the intersections of Liberty Road with Lockwood Drive to the east, and Liberty Road and Altoona Street to the west. The residential areas surrounding the UPRR facility include the historically African American Greater Fifth Ward neighborhood, and the nearby Denver Harbor, and Kashmere Gardens neighborhoods.

b. The UPRR Site is industrial land, and was first established for creosoting operations in 1911 by the Southern Pacific Transportation Company. Creosoting operations continued until 1984 when operations ceased. Through a series of mergers, UPRR acquired Southern Pacific Transportation Company in 1997. Through that merger, UPRR is the current owner and operator of the Site, and is the successor to the Southern Pacific Railroad Company. UPRR is incorporated in the state of Delaware, and its primary business is railroad line-haul operations. UPRR is currently addressing the Site's contamination as owner and operator of the facility by implementing cleanup operations according to site remediation and permitting programs administered by TCEQ.

c. Historical operations at the UPRR Site included the treatment of railroad ties with creosote and pentachlorophenol to prevent rotting, and creosote processing and waste disposal. The Site operations utilized creosote extenders composed of industrial chemical wastes, including chlorinated materials. Other hazardous chemicals used at the Site operations for wood treatment included naphtha, heavy fuel oils, styrene tar, and diesel fuel. Treatment processes generated a waste stream consisting of liquid creosote wastes and potentially other solid and hazardous wastes. This waste stream was initially managed in two solid waste management units until the mid-1970s, when Southern Pacific began to manage the stream first in a wood-lined drainage ditch and then in a surface impoundment.

d. UPRR and its predecessor entity each operated the adjacent Englewood Intermodal Yard facility as part of their Site operations. The Englewood Intermodal Yard is located on the southern portion of the Site, separated by the UPRR mainline rail, and is currently used for the transfer of box containers between rail cars and truck trailers. Historic uses of the Englewood Intermodal Yard included a wastewater lagoon and aboveground storage tanks, both of which contributed to contamination at the Site.

e. By the 1970s, contamination attributable to operations at the UPRR Site reached the groundwater and migrated to the Greater Fifth Ward neighborhood. Groundwater plumes of non-aqueous phase liquids ("NAPL"), and associated dissolved/chlorinated wastes contamination extend north and northeast of the UPRR Site. An EPA Site Investigation Report dated September 9, 1986, confirmed that the groundwater was contaminated with cresote constituents released from the Site. Surface soil contaminated with creosote constituents was also confirmed in a stormwater run-off pathway discharged from the Site and ultimately into Buffalo Bayou, an urban area stream near the Site. The Houston Department of Health conducted a passive soil gas survey in an area north of the UPRR Site in November 2020. The Houston Department of Health concluded that the data did not indicate the presence of an inhalation risk from soil vapor intrusion. In April 2021, the Texas Department of State Health Services reviewed available vapor intrusion information, and recommended additional investigation to assess potential vapor intrusion in residential areas overlaying the off-site groundwater contamination plume.

f. Although cleanup plans have been proposed for the UPRR Site, including a multi-phase groundwater extraction system and a slurry wall, additional Site investigation and characterization efforts are necessary to identify and evaluate conditions both on-site and off-site of the UPRR Site. In the recent past, the appearance of tar-like seeps have emerged from the concrete and asphalt cap overlaying the Englewood Intermodal Yard. UPRR manages these seeps through weekly inspections and recovery efforts, and attributes the emergence of this contamination to the former use of aboveground storage tanks and wastewater lagoons in the vicinity of the Englewood Intermodal Yard.

g. A City of Houston Health Department September 21, 2022, soil sampling report revealed that although several previous on-site and off-site investigations completed by UPRR revealed the presence of various chemicals of concern ("COCs"), those investigations did not focus on other potential COCs associated with wood preserving such as dioxins/furans, polychlorinated biphenyls ("PCBs"), and hexavalent chromium. The primary purpose of the September 2022 soil investigation was to determine the presence of dioxins/furans, PCBs, and hexavalent chromium in surface and subsurface soils in residential properties and City of Houston rights of way property around and near the UPRR Site. The report concluded that additional Site investigation and characterization efforts were necessary to identify and evaluate conditions both on-site and off-site of the UPRR Site.

h. The September 21, 2022, soil sampling report showed that the distribution of elevated dioxins/furans concentrations in soil samples were often greater nearer the UPRR Site and decreased at locations further away. Dioxins/furans concentrations were identified in soil samples across the study area. The 2022 soil sample results also verified that the City of Houston right-of-way property adjacent to Liberty Road and the UPRR Site had elevated PCB concentrations.

i. In 2019 and 2020 the Texas Department of State Health and Services (TDSHS) examined the occurrence of cancer in 11 census blocks selected by the Houston Health Department. The Site straddles the boundary of blocks 2111 and 2113. The purpose of the assessment was to determine whether the observed number of cancer cases is statistically significantly greater than expected. The TDSHS report states that the assessment is not intended to determine the cause of the observed cancers or identify possible associations with any risk factors. TDSHS concluded that lung and bronchus, esophagus, liver, leukemia, and larynx cancers were statistically significantly greater than expected in the total area defined as Fifth Ward, Denver Harbor, and Kashmere Gardens neighborhoods. Research

conducted in 2021 found that leukemia rates in the Fifth Ward census tract (2111) west of the Site was statistically significantly higher than expected.

j. Many of the hazardous substances identified above, including dioxins, furans, PCBs, chlorinated solvents, and creosote are classified as either known human carcinogens, probable human carcinogens, or possibly carcinogenic.

V. CONCLUSIONS OF LAW AND DETERMINATIONS

9.2 Based on the Findings of Fact set forth above, and the administrative record, EPA has determined that:

a. The UPRR Site is a "facility" as defined by Section 101(9) of CERCLA, 42 U.S.C. § 9601(9).

b. The contamination found at the Site, as identified in the Findings of Fact above, includes "hazardous substances" as defined by Section 101(14) of CERCLA, 42 U.S.C. § 9601(14).

c. Respondent is a "person" as defined by Section 101(21) of CERCLA, 42 U.S.C. § 9601(21).

d. Respondent is a responsible party under Section 107(a) of CERCLA, 42 U.S.C. § 9607(a). The Respondent is the "owner" and/or "operator" of the facility, as defined by Section 101(20) of CERCLA, 42 U.S.C. § 9601(20), and within the meaning of Section 107(a)(1) of CERCLA, 42 U.S.C. § 9607(a)(1). The Respondent also arranged for disposal or treatment, of hazardous substances at the facility, within the meaning of Section 107(a)(3) of CERCLA, 42 U.S.C. § 9607(a)(3).

e. The conditions described in the Findings of Fact above constitute an actual or threatened "release" of a hazardous substance from the facility as defined by Section 101(22) of CERCLA, 42 U.S.C. § 9601(22).

f. The conditions at the Site described in the Findings of Fact above may constitute an imminent and substantial endangerment to the public health or welfare or the environment because of an actual or threatened release of a hazardous substance from the facility.

g. The removal action required by this Settlement is necessary to protect the public health, welfare, or the environment.

VI. ORDER AND AGREEMENT

10. Based upon the Findings of Fact, Conclusions of Law, and Determinations set forth above, and the administrative record, it is hereby Ordered and Agreed that Respondent shall comply with all provisions of this Settlement, including, but not limited to, all appendices to this Settlement and all documents incorporated by reference into this Settlement.

VII. COORDINATION AND SUPERVISION

11. **Respondent's Project Coordinator**

a. Respondent shall designate and notify EPA, within five (5) days after the Effective Date, of the name, title, contact information, and qualifications of the Respondent's proposed Project Coordinator. Respondent's Project Coordinator will be responsible for administration of all actions by Respondent required by this Settlement.

b. Respondent's Project Coordinator must have sufficient technical expertise to coordinate the Work. To the greatest extent possible, the Project Coordinator shall be present on Site or readily available during Site work.

c. Notice or communication relating to this Settlement from EPA to Respondent's Project Coordinator constitutes notice or communication to Respondent.

d. Respondent may change its Project Coordinator by following the procedures under Paragraph 12.

12. **Procedures for Notice and Disapproval**

a. Respondent shall notify EPA of the names, titles, contact information, and qualifications of any contractors or subcontractors retained to perform the Work at least seven (7) days prior to commencement of such Work.

b. EPA may issue notices of disapproval regarding any proposed Project Coordinator, contractor, or subcontractor, as applicable. If EPA issues a notice of disapproval, Respondent shall, within seven (7) days, submit to EPA a list of supplemental proposed Project Coordinators, contractors, or subcontractors, as applicable, including a description of the qualifications of each.

c. EPA may disapprove the proposed Project Coordinator, contractor, or subcontractor, based on objective assessment criteria (e.g., experience, capacity, technical expertise), if they have a conflict of interest regarding the project, or any combination of these factors.

13. **EPA On-Scene Coordinator/EPA Remedial Project Manager**. EPA designates Casey Luckett of the Remedial Branch, Superfund and Emergency Management Division, as its Remedial Project Manager ("RPM"). The EPA RPM shall have primary oversight authority under this Settlement and SOW, including oversight of Respondent's implementation of the Work, authority to halt, conduct, or direct any Work, or to direct any other removal action undertaken at the Site under this Settlement. EPA designates Idrissa Quedraogo of the Emergency Management Branch, Superfund and Emergency Management Division, as its On-Scene Coordinator ("OSC"). The OSC has the authorities described in the NCP, including oversight of Respondent's implementation of the Work, authority to halt, conduct, or direct any Work, or to direct any other removal action undertaken at the Site under this Settlement. The RPM's or OSC's absence from the Site is not a cause for stoppage of work. EPA may change its RPM or OSC and will notify Respondent of any such change.

VIII. PERFORMANCE OF THE WORK

14. Respondent shall perform the Work in accordance with this Settlement, including all EPA-approved, conditionally approved, or modified deliverables as required by this Settlement. The Work includes, at a minimum, all actions necessary to implement the Statement of Work, including the following:

a. Conduct onsite and off-site soil sampling for the primary Potential Contaminants of Concern ("PCOC") as defined in the Statement of Work;

b. Perform: (i) soil gas sampling and potentially perform sub slab or crawl space sampling if soil gas sampling results indicate concentrations of PCOCs that may present an

unacceptable human health risk; and (ii) utility conduit corridor sampling and assessment as part of a vapor intrusion investigation in the residential area north of the Site that overlays the creosote/DNAPL contaminated plume in deep groundwater zones;

c. Conduct an evaluation of the nearby off-site storm sewer system impacts and connections to onsite storm sewers;

d. Create a shared analytical database for use by stakeholders identified by EPA;

e. Develop a proposal to support EPA's Community Involvement Plan; and

f. Conduct risk evaluation.

15. Respondent's obligations to finance and perform the Work and to pay amounts due under this Settlement are joint and several. In the event of the insolvency of Respondent, Respondent's successors shall complete the Work and make the payments.

16. For any regulation or guidance referenced in the Settlement, the reference will be read to include any subsequent modification, amendment, or replacement of such regulation or guidance. Such modifications, amendments, or replacements apply to the Work only after Respondent receives notification from EPA of the modification, amendment, or replacement.

17. **Removal Work Plan.** Within thirty (30) days after the Effective Date, Respondent shall submit to EPA for approval in accordance with Paragraph 21 (Deliverables: Specifications and Approval) a work plan for performing the Work (the "Removal Work Plan") as described in Paragraph 14. The Removal Work Plan shall provide a description of, and an expeditious schedule for, the actions required by this Settlement. The Removal Work Plan must describe all community impact mitigation activities to be performed to: (i) reduce any impacts (e.g., air emissions, dust, odor, traffic, noise, temporary relocation as appropriate, negative economic effects as appropriate) to residential areas, schools, playgrounds, healthcare facilities, or recreational public areas frequented by community members ("Community Areas") caused by implementation of the Removal Action; (ii) conduct all appropriate monitoring in Community Areas of impacts from the implementation of the Removal Action; (iii) communicate validated sampling data; and (iv) make adjustments during the implementation of the Removal Action in order to further reduce negative impacts to affected Community Areas. The Removal Work Plan shall contain information about the Removal Action Work performance and anticipated impacts that may arise in Community Areas that is sufficient to assist EPA's RPM and OSC in performing the evaluations described in the Superfund Community Involvement Handbook, OLEM 9230.0-51 (Mar. 2020). The Handbook is located at https://www.epa.gov/superfund/superfund-community-involvementtools-and-resources#handbook.

18. **Health and Safety Plan**. Within forty-five (45) days after the Effective Date, Respondent shall submit for EPA review and comment a Health and Safety Plan ("HASP") that meets the requirements of 29 C.F.R. § 910.120 for developing the HASP, that describes all activities to be performed to protect on-site personnel and area residents from physical, chemical, biological and all other hazards related to performance of Work under this Settlement. This HASP shall be prepared in accordance with EPA's Emergency Responder Health and Safety Manual, OSWER 9285.3-12 (July 2005 and updates), available on the Agency's website at https://www.epaosc.org/_HealthSafetyManual/manual-index.htm. In addition, the Respondent shall

ensure that the HASP complies with all currently applicable Occupational Safety and Health Administration ("OSHA") regulations found at 29 C.F.R. part 1910. If EPA determines that it is appropriate, the HASP shall also include contingency planning. Respondent shall incorporate all changes to the HASP recommended by EPA and shall implement the HASP during the pendency of the Work.

19. **Quality Assurance, Sampling, and Data Analysis**

a. Respondent shall use quality assurance, quality control, and other technical activities and chain of custody procedures for all samples consistent with EPA's Environmental Information Quality Policy, CIO 2105.1) (Mar. 2021) at https://www.epa.gov/irmpoli8/environmental-information-quality-policy, the most recent version of Quality Management Systems for Environmental Information and Technology Programs – Requirements with Guidance for Use, ASQ/ANSI E-4 (Feb. 2014), and EPA Requirements for Quality Assurance Project Plans, EPA QA/G-5 (EPA/240/B-01/02) (Mar. 2001) at https://www.epa.gov/quality/epa-qar-5-epa-requirements-quality-assurance-project-plans.

b. Respondent shall ensure that EPA personnel and their authorized representatives are allowed access at reasonable times to all laboratories utilized by Respondent in implementing this Settlement. In addition, Respondent shall ensure that such laboratories shall analyze all samples submitted by EPA pursuant to the QAPP for quality assurance monitoring, quality control, and technical activities that will satisfy the stated performance criteria as specified in the QAPP and that sampling and field activities are conducted in accordance with the Agency's "EPA QA Field Activities Procedure," CIO-2105-P-02.1 (9/23/2014) available at https://www.epa.gov/irmpoli8/epa-qa-field-activities-procedures. Respondent shall ensure that the laboratories it utilizes for the analysis of samples taken pursuant to this Settlement meet the competency requirements set forth in EPA's "Policy to Assure Competency of Laboratories, Field Sampling, and Other Organizations Generating Environmental Measurement Data under Agency-Funded Acquisitions" available at https://www.epa.gov/measurements/documents-about-measurement-competency-under-acquisition-agreements and that the laboratories perform all analyses according to accepted EPA methods. Accepted EPA methods consist of, but are not limited to, methods that are documented in the EPA's Contract Laboratory Program (https://www.epa.gov/clp), SW 846 "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods" (https://www.epa.gov/hw-sw846), "Standard Methods for the Examination of Water and Wastewater" (http://www.standardmethods.org/), 40 C.F.R. Part 136, "Air Toxics - Monitoring Methods" (https://www3.epa.gov/ttnamti1/airtox.html).

c. Upon request, Respondent shall provide split or duplicate samples to EPA and TCEQ or their authorized representatives. Respondent shall notify EPA and TCEQ not less than seven (7) days prior to any sample collection activity unless shorter notice is agreed to by EPA. In addition, EPA and TCEQ have the right to take any additional samples that EPA or TCEQ deem necessary. Upon request, EPA and TCEQ may provide to Respondent, split and/or duplicate samples in connection with EPA's and TCEQ's oversight sampling.

d. Respondent shall submit to EPA the results of all sampling and/or tests or other data obtained or generated by or on behalf of Respondent or in connection with respect to the Site and/or the implementation of this Settlement. Respondent shall expedite all data generation and validation for residential sampling activities as required in SOW Work Plans approved by EPA.

20. **Community Involvement**. EPA has the lead responsibility for implementing community involvement activities at the Site, including the preparation of a community involvement plan, in accordance with the NCP and EPA guidance. As requested by EPA, Respondent shall participate in community involvement activities, including participation in (a) the preparation of information regarding the Work for dissemination to the public (including compliance schedules and progress reports), with consideration given to specific needs of the community, including translated materials and mass media and/or Internet notification, and (b) public meetings that may be held or sponsored by EPA to explain activities at or relating to the Site.

21. **Deliverables: Specifications and Approval**

a. **General Requirements for Deliverables**. Respondent shall submit all deliverables to EPA in electronic form, unless otherwise specified by the RPM.

b. **Technical Specifications for Deliverables**. Sampling and monitoring data should be submitted in standard Regional Electronic Data Deliverable ("EDD") format. Other delivery methods may be allowed if electronic direct submission presents a significant burden or as technology changes.

c. **Approval of Deliverables**. After review of the Removal Work Plan and any other deliverable required to be submitted for EPA approval under the Settlement, EPA shall: (1) approve, in whole or in part, the deliverable; (2) approve the submission upon specified conditions or required revisions to the deliverable; (3) disapprove, in whole or in part, the deliverable; or (4) any combination of the foregoing. If EPA requires revisions, EPA will provide a deadline for the resubmission, and Respondent shall submit the revised deliverable by the required deadline. Once approved or approved with conditions or required revisions, Respondent shall implement the Removal Work Plan or other deliverable in accordance with the EPA-approved schedule. Upon approval, or subsequent modification, by EPA of any deliverable, or any portion thereof: (1) such deliverable, or portion thereof, and any subsequent modifications, will be incorporated into and enforceable under the Settlement; and (2) Respondent shall take any action required by such deliverable, or portion thereof. Respondent shall not commence or perform any Work except in conformance with the terms of this Settlement.

22. **Off-Site Shipments**

a. Respondent may ship hazardous substances, pollutants and contaminants from the Site to an off-site facility only if such shipments are in compliance with section 121(d)(3) of CERCLA and 40 C.F.R. § 300.440. Respondent will be deemed to be in compliance with section 121(d)(3) of CERCLA and 40 C.F.R. § 300.440 regarding a shipment if Respondent obtain a prior determination from EPA that the proposed receiving facility for such shipment is acceptable under the criteria of 40 C.F.R. § 300.440(b).

b. Respondent may ship Waste Material from the Site to an out-of-state waste management facility only if, prior to any shipment, Respondent provides written notice to the appropriate state environmental official in the receiving facility's state and to the RPM. This written notice requirement will not apply to any off-site shipments when the total quantity of all such shipments does not exceed 10 cubic yards. The written notice must include the following information, if available: (1) the name and location of the receiving facility; (2) the type and quantity of Waste Material to be shipped; (3) the schedule for the shipment; and (4) the method of transportation. Respondent also shall notify the state environmental official referenced above and the RPM of any major changes in the

shipment plan, such as a decision to ship the Waste Material to a different out-of-state facility. Respondent shall provide the written notice after the award of the contract for the Removal Action and before the Waste Material is shipped.

c. Respondent may ship Investigation Derived Waste ("IDW") from the Site to an off-site facility only if Respondent complies with section 121(d)(3) of CERCLA, 40 C.F.R. § 300.440, EPA's Guide to Management of Investigation Derived Waste, OSWER 9345.3-03FS (Jan. 1992) (https://semspub.epa.gov/work/03/136166.pdf), and any IDW-specific requirements contained in the SOW. Wastes shipped off-site to a laboratory for characterization, and RCRA hazardous wastes that meet the requirements for an exemption from RCRA under 40 C.F.R. § 261.4(e) shipped off-site for treatability studies, are not subject to 40 C.F.R. § 300.440.

23. **Permits**

a. As provided in CERCLA § 121(e), and section 300.400(e) of the NCP, no permit is required for any portion of the Work conducted entirely on-site (i.e., within the areal extent of contamination or in very close proximity to the contamination and necessary for implementation of the Work). Where any portion of the Work that is not on-site requires a federal or state permit or approval, Respondent shall submit timely and complete applications and take all other actions necessary to obtain all such permits or approvals.

b. Respondent may seek relief under the provisions of Section XIII (Force Majeure) of the Settlement for any delay in the performance of the Work resulting from a failure to obtain, or a delay in obtaining, any permit or approval referenced in Paragraph 23.a and required for the Work, provided that Respondent has submitted timely and complete applications and taken all other actions necessary to obtain all such permits or approvals.

c. Nothing in the Settlement constitutes a permit issued under any federal or state statute or regulation.

24. **Emergency Response**. If any event occurs during performance of the Work that causes or threatens to cause a release of Waste Material on, at, or from the Site and that either constitutes an emergency situation or that may present an immediate threat to public health or welfare or the environment, Respondent shall: (a) immediately take all appropriate action to prevent, abate, or minimize such release or threat of release; (b) immediately notify the RPM or, in the event of their unavailability, the Regional Duty Officer at (866) 372-7745 of the incident or Site conditions; and (c) take such actions in consultation with the RPM or authorized EPA officer and in accordance with all applicable provisions of this Settlement, including, the Health and Safety Plan, and any other applicable deliverable approved by EPA.

25. **Release Reporting**. Upon the occurrence of any event during performance of the Work that Respondent is required to report under CERCLA § 103 or section 304 of the Emergency Planning and Community Right-to-Know Act ("EPCRA"), 42 U.S.C. § 11004, Respondent shall immediately orally notify the RPM or, in the event of their unavailability, the Regional Duty Officer at (866) 372-7745, and the National Response Center at (800) 424-8802. Respondent shall also submit a written report to EPA within seven (7) days after the onset of such event, (a) describing the event, and (b) all measures taken and to be taken: (1) to mitigate any release or threat of release, (2) to mitigate any endangerment

caused or threatened by the release; and (3) to prevent the reoccurrence of any such a release or threat of release. The reporting requirements under this Paragraph are in addition to the reporting required by CERCLA §§ 103 and 111(g) or EPCRA § 304.

26. **Progress Reports**. Commencing upon EPA's approval of the Removal Work Plan and until issuance of Notice of Completion of Work under Paragraph 29, Respondent shall submit written progress reports to EPA on a weekly and monthly basis, or as otherwise directed in writing by the RPM. These reports must describe all significant developments during the preceding reporting period, including the actions performed and any problems encountered, analytical data received during the reporting period, and the developments anticipated during the next reporting period, including a schedule of actions to be performed, anticipated problems, and planned resolutions of past or anticipated problems.

27. **Additional Activities**. If EPA determines that additional actions not included in the Removal Work Plan or other approved plans are necessary to protect public health or welfare or the environment, EPA will notify Respondent of that determination. Respondent also may request modification of the approved Removal Work Plan or other deliverables. Respondent shall, within thirty (30) days thereafter, submit a revised Removal Work Plan and other deliverables as necessary to EPA for approval. Respondent shall implement the revised Removal Work Plan and any other deliverables upon EPA's approval in accordance with the procedures of Paragraph 21 in accordance with the approved provisions and schedule. This Paragraph does not limit the RPM's authority to make oral modifications to any plan or schedule pursuant to Section XXII.

28. **Final Report**

a. Within forty-five (45) days after completion of all Work required by this Settlement other than the continuing obligations listed in Paragraph 29.a, Respondent shall submit for EPA review and approval a final report regarding the Work. The final report must:

(1) Summarize the actions taken to comply with the SOW under this Settlement;

(2) Conform to the requirements of section 300.165 of the NCP ("OSC Reports");

(3) If applicable, list the quantities and types of materials removed off-site or handled onsite;

(4) If applicable, describe the removal and disposal options considered for those materials;

(5) If applicable, identify the ultimate destination(s) of those materials;

(6) Include the analytical results of all sampling and analyses performed; and

(7) Include all relevant documentation generated during the Work (e.g., manifests, invoices, bills, contracts, and permits) and an estimate of the total costs incurred to complete the Work.

b. The final report must also include the following certification signed by a responsible corporate official of a Respondent or Respondent's Project Coordinator: "I certify under penalty of perjury that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the

information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I have no personal knowledge that the information submitted is other than true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

29. **Notice of Completion of Work**

a. If after reviewing the Final Report under Paragraph 28, EPA determines that all Work, other than the continuing obligations, has been fully performed in accordance with this Settlement, EPA will provide notice to Respondent. A notice of completion of work is not a protectiveness determination and does not affect the following continuing obligations:

(1) Implementing and maintaining the requirements of the Post-Removal Site Controls Plan, if any such plan is required by EPA;

(2) Obligations under Section IX (Property Requirements);

(3) Payment of Future Response Costs;

(4) Obligations under Section XIX (Records);

b. If EPA determines that any Work other than the continuing obligations has not been completed in accordance with this Settlement, EPA will so notify Respondent and provide a list of deficiencies to be corrected and a schedule for correcting them. Respondent shall promptly correct all identified deficiencies in accordance with the schedule provided and shall submit a modified Final Report following completion of such work. Subsequent determinations by EPA regarding completion of Work shall be handled in accordance with this Paragraph.

30. **Compliance with Applicable Law**. Nothing in this Settlement affects Respondent's obligations to comply with all applicable state and federal laws and regulations, except as provided in section 121(e) of CERCLA, and 40 C.F.R. §§ 300.400(e) and 300.410. In accordance with 40 C.F.R. § 300.415(j), the Respondent agrees that all on-site actions required pursuant to this Settlement shall, to the extent practicable, as determined by EPA, considering the exigencies of the situation, attain applicable or relevant and appropriate requirements ("ARARs") under federal environmental or state environmental or facility siting laws. Respondent shall include ARARs selected by EPA in the Removal Work Plan. The activities conducted in accordance with this Settlement, if approved by EPA, will be deemed to be consistent with the NCP as provided under section 300.700(c)(3)(ii).

31. **Work Takeover**

a. If EPA determines that Respondent: (1) has ceased implementation of any portion of the Work required this Section; (2) is seriously or repeatedly deficient or late in performing the Work required under this Section; or (3) is implementing the Work required under this Section in a manner that may cause an endangerment to public health or welfare or the environment, EPA may issue a notice of Work Takeover to Respondent, including a description of the grounds for the notice and a period of time ("Remedy Period") within which Respondent shall remedy the circumstances giving rise

to the notice. The Remedy Period will be twenty (20) days, unless EPA determines in its unreviewable discretion that there may be an endangerment, in which case the Remedy Period will be ten (10) days.

b. If, by the end of the Remedy Period, Respondent does not remedy to EPA's satisfaction the circumstances giving rise to the notice of Work Takeover, EPA may notify Respondent and, as it deems necessary, commence a Work Takeover.

c. EPA may conduct the Work Takeover during the pendency of any dispute under Section XIV but shall terminate the Work Takeover if and when: (1) Respondent remedies, to EPA's satisfaction, the circumstances giving rise to the notice of Work Takeover; or (2) upon the issuance of a final determination under Section XIV that EPA is required to terminate the Work Takeover.

IX. PROPERTY REQUIREMENTS

32. If the Site, or any other property where access is needed to implement this Settlement, is owned or controlled by the Respondent, the Respondent shall, commencing on the Effective Date, provide EPA, the State, and their representatives, including contractors, with access at all reasonable times to the Site, or such other property, for the purpose of conducting any activity related to this Settlement. Where any action under this Settlement is to be performed in areas owned or controlled by someone other than Respondent, Respondent shall use best efforts to obtain all necessary agreements for access, enforceable by Respondent and EPA, within thirty (30) days after the Effective Date, or as otherwise specified in writing by the RPM.

33. As used in this Section, "best efforts" means the efforts that a reasonable person in the position of Respondent would use to achieve the goal in a timely manner, including the cost of employing professional assistance and the payment of reasonable sums of money such as payment to professional assistants to secure access [or use restriction] agreements, as required by this Section. If Respondent cannot accomplish what is required through "best efforts" in a timely manner, Respondent shall notify EPA, and include a description of the steps taken to achieve the requirements. If EPA deems it appropriate, it may assist Respondent, or take independent action, to obtain such access and/or use restrictions.

34. Any Respondent who owns or controls any property at the Site shall, prior to entering into a contract to Transfer any of its affected property that is part of the Site, or sixty (60) days prior to a Transfer of such property, whichever is earlier, Respondent shall: (a) give written notice to the proposed transferee that the property is subject to this Settlement; and (b) give written notice to EPA and TCEQ of the proposed Transfer, including the name and address of the transferee. Respondent also agrees to require that its successors comply with this Section IX and Section XIX (Records).

35. Notwithstanding any provision of the Settlement, EPA and TCEQ retain all of their access authorities and rights, as well as all of their rights to require land, water, or other resource use restrictions, including enforcement authorities related thereto under CERCLA, RCRA, and any other applicable statute or regulations.

X. FINANCIAL ASSURANCE

36. To ensure completion of the Work required under Section VIII (Performance of Work), Respondent shall secure financial assurance, initially in the amount of $6,800,000 ("Estimated Cost of

the Work"), for the benefit of EPA. The financial assurance must: (a) be one or more of the mechanisms listed below, in a form substantially identical to the relevant sample documents available from EPA; and (b) be satisfactory to EPA. As of the date of signing this Settlement, the sample documents can be found under the "Financial Assurance - Settlements" category on the Cleanup Enforcement Model Language and Sample Documents Database at https://cfpub.epa.gov/compliance/models/. Respondent may use multiple mechanisms if they are limited to surety bonds guaranteeing payment, letters of credit, trust funds, insurance policies, or some combination thereof. The following are acceptable mechanisms:

a. A surety bond guaranteeing payment and/or performance of the Work that is issued by a surety company among those listed as acceptable sureties on federal bonds as set forth in Circular 570 of the U.S. Department of the Treasury;

b. An irrevocable letter of credit, payable to or at the direction of EPA, that is issued by an entity that has the authority to issue letters of credit and whose letter-of-credit operations are regulated and examined by a federal or state agency;

c. A trust fund established for the benefit of EPA that is administered by a trustee that has the authority to act as a trustee and whose trust operations are regulated and examined by a federal or state agency;

d. A policy of insurance that provides EPA with acceptable rights as a beneficiary thereof and that is issued by an insurance carrier that has the authority to issue insurance policies in the applicable jurisdiction(s) and whose insurance operations are regulated and examined by a federal or state agency;

e. A demonstration by Respondent that it meets the financial test criteria of Paragraph 37, accompanied by a standby funding commitment, that requires the affected Respondent to pay funds to or at the direction of EPA, up to the amount financially assured through the use of this demonstration in the event of a Work Takeover; or

f. A guarantee to fund or perform the Work executed in favor of EPA by a company: (1) that is a direct or indirect parent company of a Respondent or has a "substantial business relationship" (as defined in 40 C.F.R. § 264.141(h)) with a Respondent; and (2) can demonstrate to EPA's satisfaction that it meets the financial test criteria of Paragraph 38.

37. If Respondent seeks to provide financial assurance by means of a demonstration or guarantee under Paragraph 36.e or 36.f, Respondent must, within thirty (30) days of the Effective Date:

a. Demonstrate that:

(1) the Respondent or the guarantor has:

i. Two of the following three ratios: a ratio of total liabilities to net worth less than 2.0; a ratio of the sum of net income plus depreciation, depletion, and amortization to total liabilities greater than 0.1; and a ratio of current assets to current liabilities greater than 1.5; and

ii. Net working capital and tangible net worth each at least six times the sum of the Estimated Cost of the Work and the amounts, if any, of other federal, state, or tribal environmental obligations financially assured through the use of a financial test or guarantee; and

iii. Tangible net worth of at least $10 million; and

iv. Assets located in the United States amounting to at least 90 percent of total assets or at least six times the sum of the Estimated Cost of the Work and the amounts, if any, of other federal, state, or tribal environmental obligations financially assured through the use of a financial test or guarantee; or

(2) The Respondent or guarantor has:

i. A current rating for its senior unsecured debt of AAA, AA, A, or BBB as issued by Standard and Poor's or Aaa, Aa, A or Baa as issued by Moody's; and

ii. Tangible net worth at least six times the sum of the Estimated Cost of the Work and the amounts, if any, of other federal, state, or tribal environmental obligations financially assured through the use of a financial test or guarantee; and

iii. Tangible net worth of at least $10 million; and

iv. Assets located in the United States amounting to at least 90 percent of total assets or at least six times the sum of the Estimated Cost of the Work and the amounts, if any, of other federal, state, or tribal environmental obligations financially assured through the use of a financial test or guarantee; and

b. Submit to EPA for the Respondent or guarantor: (1) a copy of an independent certified public accountant's report of the entity's financial statements for the latest completed fiscal year, which must not express an adverse opinion or disclaimer of opinion; and (2) a letter from its chief financial officer and a report from an independent certified public accountant substantially identical to the sample letter and reports available from EPA or under the "Financial Assurance - Settlements" subject list category on the Cleanup Enforcement Model Language and Sample Documents Database at https://cfpub.epa.gov/compliance/models/.

38. If Respondent provides financial assurance by means of a demonstration or guarantee under Paragraph 36.e or 36.f, Respondent must also:

a. Annually resubmit the documents described in Paragraph 37.b within ninety (90) days after the close of the Respondent's or guarantor's fiscal year;

b. Notify EPA within thirty (30) days after the Respondent or guarantor determines that it no longer satisfies the relevant financial test criteria and requirements set forth in this Section; and

c. Provide to EPA, within thirty (30) days of EPA's request, reports of the financial condition of the Respondent or guarantor in addition to those specified in Paragraph 37.b; EPA may make such a request at any time based on a belief that the affected Respondent or guarantor may no longer meet the financial test requirements of this Section.

39. Respondent shall, within thirty (30) days after the Effective Date, seek EPA's approval of the form of Respondent's financial assurance. Within forty-five (45) days after the Effective Date, Respondent shall secure all executed or otherwise finalized mechanisms or other documents consistent with the EPA-approved form of financial assurance and shall submit such mechanisms and documents to EPA in accordance with Paragraph 36.

40. Respondent shall diligently monitor the adequacy of the financial assurance. If the Respondent becomes aware of any information indicating that the financial assurance provided under this Section is inadequate or otherwise no longer satisfies the requirements of this Section, Respondent shall notify EPA of such information within seven (7) days. If EPA determines that the financial assurance provided under this Section is inadequate or otherwise no longer satisfies the requirements of this Section, EPA will notify the Respondent of such determination. Respondent shall, within thirty (30) days after notifying EPA or receiving notice from EPA under this Paragraph, secure and submit to EPA for approval a proposal for a revised or alternative financial assurance mechanism that satisfies the requirements of this Section. EPA may extend this deadline for such time as is reasonably necessary for the Respondent, in the exercise of due diligence, to secure and submit to EPA a proposal for a revised or alternative financial assurance mechanism, not to exceed sixty (60) days. Respondent shall follow the procedures of Paragraph 42 (Modification of Amount, Form, or Terms of Financial Assurance) in seeking approval of, and submitting documentation for, the revised or alternative financial assurance mechanism. Respondent's inability to secure financial assurance in accordance with this Section does not excuse performance of any other requirement of this Settlement.

41. **Access to Financial Assurance**

a. If EPA issues a notice of a Work Takeover under Paragraph 31.b, then, in accordance with any applicable financial assurance mechanism, EPA may require: (1) the performance of the Work; and/or (2) that any funds guaranteed be paid in accordance with Paragraph 41.d.

b. If EPA is notified that the issuer of a financial assurance mechanism intends to cancel the mechanism, and the Respondent fails to provide an alternative financial assurance mechanism in accordance with this Section at least thirty (30) days prior to the cancellation date, the funds guaranteed under such mechanism must be paid prior to cancellation in accordance with Paragraph 41.d.

c. If, upon issuance of a notice of a Work Takeover under Paragraph 31, either: (1) EPA is unable for any reason to promptly secure the resources guaranteed under any applicable financial assurance mechanism [including the related standby funding commitment, if applicable], whether in cash or in kind, to continue and complete the Work; or (2) the financial assurance is a demonstration or guarantee under Paragraph 36.e or 36.f, then EPA is entitled to demand an amount, as determined by EPA, sufficient to cover the cost of the remaining Work to be performed. Respondent shall, within thirty (30) days after such demand, pay the amount demanded as directed by EPA.

d. Any amounts required to be paid under this Paragraph 41 must be, as directed by EPA: (i) paid to EPA in order to facilitate the completion of the Work by EPA, the State, or by another person; or (ii) deposited into an interest-bearing account, established at a duly chartered bank or trust company that is insured by the FDIC, in order to facilitate the completion of the Work by another person. If payment is made to EPA, EPA may deposit the payment into the Fund or into the Special Account to be retained and used to conduct or finance response actions at or in connection with the Site, or to be transferred by EPA to the Fund.

42. **Modification of Amount, Form, or Terms of Financial Assurance**. On any anniversary of the Effective Date, or at any other time agreed to by the Parties, Respondent may request to change the form, terms, or amount of the financial assurance mechanism. Respondent shall submit any such request to EPA in accordance with Paragraph 39, and shall include an estimate of the cost of the

remaining Work, an explanation of the bases for the cost calculation, and a description of the proposed changes, if any, to the form or terms of the financial assurance. EPA will notify Respondent of its decision regarding the request. Respondent may modify the form, terms, or the amount of the financial assurance mechanism only in accordance with: (a) EPA's approval; or (b) any resolution of a dispute on the appropriate amount of financial assurance under Section XIV. Any decision made by EPA on a request submitted under this Paragraph to change the form or terms of a financial assurance mechanism shall not be subject to challenge by Respondent pursuant to the dispute resolution provisions of this Settlement or in any other forum. Respondent shall submit to EPA, within 30 days after receipt of EPA's approval, or consistent with the terms of the resolution of the dispute, documentation of the change to the form, terms, or amount of the financial assurance instrument.

43. **Release, Cancellation, or Discontinuation of Financial Assurance**. Respondent may release, cancel, or discontinue any financial assurance provided under this Section only: (a) if EPA issues a Notice of Completion of Work under Paragraph 29; (b) in accordance with EPA's approval of such release, cancellation, or discontinuation; or (c) if there is a dispute regarding the release, cancellation, or discontinuance of any financial assurance, in accordance with the agreement or final decision resolving such dispute under Section XIV.

XI. INDEMNIFICATION AND INSURANCE

44. **Indemnification**

a. The United States does not assume any liability by entering into this Settlement or by virtue of any designation of Respondent as EPA's authorized representative under Section 104(e) of CERCLA, 42 U.S.C. § 9604(e)(1) of CERCLA. Respondent shall indemnify and save and hold harmless the United States, its officials, agents, employees, contractors, subcontractors, and representatives for or from any claims or causes of action arising from, or on account of, negligent or other wrongful acts or omissions of Respondent, its officers, directors, employees, agents, contractors, or subcontractors, and any persons acting on Respondent's behalf or under its control, in carrying out activities pursuant to this Settlement, including any claims arising from any designation of Respondent as EPA's authorized representative under Section 104(e)(1) of CERCLA. Further, Respondent agrees to pay the United States all costs it incurs, including attorneys' fees and other expenses of litigation and settlement arising from, or on account of, claims made against the United States based on negligent or other wrongful acts or omissions of Respondent, its officers, directors, employees, agents, contractors, subcontractors, and any persons acting on Respondent's behalf or under Respondent's control, in carrying out activities pursuant to this Settlement. EPA may not be held out as a party to any contract entered into by or on behalf of Respondent in carrying out activities pursuant to this Settlement. Neither Respondent nor any such contractor shall be considered an agent of the United States.

b. EPA shall give Respondent notice of any claim for which EPA plans to seek indemnification in accordance with this Paragraph 44, and shall consult with Respondent prior to settling such claim.

45. Respondent covenants not to sue and agrees not to assert any claims or causes of action against the United States for damages or reimbursement or for set-off of any payments made or to be made to the United States, arising from or on account of any contract, agreement, or arrangement between Respondent and any person for performance of Work on or relating to the Site, including

claims on account of construction delays. In addition, Respondent shall indemnify and hold harmless the United States with respect to any and all claims for damages or reimbursement arising from or on account of any contract, agreement, or arrangement between Respondent and any person for performance of Work on or relating to the Site, including claims on account of construction delays.

46. **Insurance**. Respondent shall secure, by no later than fifteen(15) days before commencing any on-site Work, the following insurance: (a) commercial general liability insurance with limits of liability of $1 million per occurrence; (b) automobile liability insurance with limits of liability of $1 million per accident; and (c) umbrella liability insurance with limits of liability of $5 million in excess of the required commercial general liability and automobile liability limits. The insurance policy must name EPA as an additional insured with respect to all liability arising out of the activities performed by or on behalf of Respondent under this Settlement. Respondent shall maintain this insurance until the first anniversary after EPA's issuance of the Notice of Completion of Work under Paragraph 29. In addition, for the duration of this Settlement, Respondent shall satisfy, or shall ensure that their contractors or subcontractors satisfy, all applicable laws and regulations regarding the provision of worker's compensation insurance for all persons performing the Work on behalf of Respondent in furtherance of this Settlement. Prior to commencement of the Work, Respondent shall provide to EPA certificates of such insurance and a copy of each insurance policy. Respondent shall resubmit such certificates and copies of policies each year on the anniversary of the Effective Date. If Respondent demonstrates by evidence satisfactory to EPA that any contractor or subcontractor maintains insurance equivalent to that described above, or insurance covering the same risks but in a lesser amount, then, with respect to that contractor or subcontractor, Respondent need provide only that portion of the insurance described above that is not maintained by the contractor or subcontractor. Respondent shall ensure that all submittals to EPA under this Paragraph identify the Union Pacific Railroad Company Houston Wood Preserving Works Site, 4910 Liberty Road, Houston, Harris County, Texas, and the EPA docket number of this case.

XII. PAYMENT OF RESPONSE COSTS

47. Payments for Future Response Costs. Respondent shall pay to EPA all Future Response Costs not inconsistent with the NCP.

a. **Prepayment of Future Response Costs**. Within thirty (30) days after the Effective Date, Respondent shall pay EPA $100,000 as an initial payment for Future Response Costs. Respondent shall make all payments required by this Paragraph online to https://www.pay.gov using the "EPA Miscellaneous Payments Cincinnati Finance Center" link, and including references to the EPA Site/Spill ID number A6VQ and the EPA docket number for this action. At the time of payment, the Respondent shall send notice that payment has been made to:

Chief, Enforcement and Cost Recovery Section (SEDAE)
US EPA, Region 6
1201 Elm Street, Suite 500
Dallas, Texas 75270

b. **Shortfall Payments**. If at any time prior to the date EPA sends Respondent the first bill under Paragraph 43.c (Periodic Bills), or one year after the Effective Date, whichever is earlier, the balance in the Union Pacific Railroad Company's Houston Wood Preserving Works Special Account falls

below $10,000, EPA will so notify the Respondent. Respondent shall, within thirty (30) days after receipt of such notice, pay $50,000 to EPA. Respondent shall make payment and send notice of the payment in accordance with the procedures under Paragraph 47.a (Prepayment of Future Response Costs). The amounts paid shall be deposited by EPA in the Union Pacific Railroad Company's Houston Wood Preserving Works Special Account. These funds shall be retained and used by EPA to conduct or finance future response actions at or in connection with the Site.

c. **Periodic Bills**. On a periodic basis, EPA will send Respondent a bill requiring payment that includes a SCORPIOS report or other standard cost summary, which includes direct and indirect costs paid by EPA, its contractors, subcontractors. Respondent may initiate a dispute under Section XIV regarding a Future Response Cost billing, but only if the dispute relates to one or more of the following issues: (1) whether EPA has made an arithmetical error; (2) whether EPA has included a cost item that is not within the definition of Future Response Costs; or (3) whether EPA has paid excess costs as a direct result of an EPA action that was inconsistent with a specific provision or provisions of the NCP. Respondent shall specify in the Notice of Dispute the contested costs and the basis for the objection.

d. **Payment of Bill**. Respondent shall pay the bill, or if Respondent initiates dispute resolution under Section XIV, the uncontested portion of the bill, if any, within thirty (30) days after receipt of the bill. Respondent shall pay the contested portion of the bill determined to be owed, if any, within thirty (30) days after the determination regarding the dispute. Each payment for: (i) the uncontested bill or portion of bill, if late, and; (ii) the contested portion of the bill determined to be owed, if any, must include an additional amount for Interest accrued from the date of receipt of the bill through the date of payment. Respondent shall make all payments at https://www.pay.gov using the "EPA Miscellaneous Payments Cincinnati Finance Center" link, and including references to the Site Name, Docket Number, and Site/Spill ID number and the purpose of the payment. Respondent shall send notices of this payment to EPA and include these references.

e. **Unused Amount.** After issuance of the Notice of Completion of Work pursuant to Paragraph 29, and a final accounting of the Union Pacific Railroad Company's Houston Wood Preserving Works Special Account (including payments under Paragraph 47.a and 47.b), EPA will apply the unused amount to any other unreimbursed response costs or response actions remaining at the Site. If there are neither unreimbursed response costs nor response actions remaining at the Site, EPA will remit and return to the Respondent the unused amount of funds paid by the Respondent pursuant to Paragraphs 47.a and 47.b.

48. **Deposit of Payments**. EPA may, in its unreviewable discretion, deposit the amounts paid under Paragraph 47 in the Fund, in the Special Account, or both. EPA may, in its unreviewable discretion, retain and use any amounts deposited in the Special Account to conduct or finance response actions at or in connection with the Site, or transfer those amounts to the Fund.

XIII. FORCE MAJEURE

49. "Force Majeure" for purposes of this Settlement, is defined as any event arising from causes beyond the control of Respondent, of any entity controlled by Respondent, or of Respondent's contractors that delays or prevents the performance of any obligation under this Settlement despite Respondent's best efforts to fulfill the obligation. Given he need to protect public health and welfare and the environment, the requirement that Respondent exercise "best efforts to fulfill the obligation"

includes using best efforts to anticipate any potential force majeure and best efforts to address the effects of any potential force majeure (a) as it is occurring and (b) following the potential force majeure such that the delay and any adverse effects of the delay are minimized to the greatest extent possible. "Force majeure" does not include financial inability to complete the Work, or increased cost of performance, or a failure to attain performance standards set forth in the SOW.

51. If any event occurs for which Respondent will or may claim a force majeure, Respondent shall notify EPA's RPM by email. The deadline for the initial notice is forty-eight (48) hours after the date Respondent first knew or should have known that the event would likely delay performance. Respondent shall be deemed to know of any circumstance of which any contractor of, subcontractor of, or entity controlled by Respondent knew or should have known. Within seven (7) days thereafter, Respondent shall send a further notice to EPA that includes: (a) a description of the event and its effect on Respondent's completion of the requirements of the Settlement; (b) a description of all actions taken or to be taken to prevent or minimize the adverse effects or delay; (c) the proposed extension of time for Respondent to complete the requirements of the Settlement; (d) a statement as to whether, in the opinion of Respondent, such event may cause or contribute to an endangerment to public health or welfare, or the environment; and (e) all available proof supporting their claim of force majeure. Failure to comply with the notice requirements herein regarding an event precludes Respondent from asserting any claim of force majeure regarding that event, provided, however, that if EPA, despite the late or incomplete notice, is able to assess to its satisfaction whether the event is a force majeure under Paragraph 50 and whether Respondent has exercised best efforts under Paragraph 50, EPA may, in its unreviewable discretion, excuse in writing Respondent's failure to submit timely or complete notices under this Paragraph.

52. EPA will notify Respondent of its determination whether Respondent is entitled to relief under Paragraph 50, and, if so, the duration of the extension of time for performance of the obligations affected by the force majeure. An extension of the time for performance of the obligations affected by the force majeure shall not, of itself, extend the time for performance of any other obligation. Respondent may initiate dispute resolution under Section XIV regarding EPA's determination within fifteen (15) days after receipt of the determination. In any such proceeding, Respondent has the burden of proving that Respondent is entitled to relief under Paragraph 50 and that the proposed extension was or will be warranted under the circumstances.

53. The failure by EPA to timely complete any obligation under the Settlement is not a violation of the Settlement, provided, however, that if such failure prevents Respondent from meeting one or more deadlines under the Settlement, Respondent may seek relief under this Section.

XIV. DISPUTE RESOLUTION

54. Unless otherwise expressly provided for in this Settlement, the dispute resolution procedures of this Section shall be the exclusive mechanism to resolve any dispute arising under this Settlement.

55. A dispute will be considered to have arisen when the Respondent sends a written notice of dispute ("Notice of Dispute") to EPA. Disputes arising under this Settlement must in the first instance be the subject of informal negotiations between the parties to the dispute. If Respondent objects to any EPA action taken pursuant to this Settlement, Respondent shall send EPA a Notice of Dispute describing

the objection within seven (7) days after such action. The period for informal negotiations may not exceed fourteen (14) days after the dispute arises, unless EPA otherwise agrees. If the parties cannot resolve the dispute by informal negotiations, the position advanced by EPA is binding unless Respondent initiates formal dispute resolution under Paragraph 56. By agreement of the parties, mediation may be used during this informal negotiation period to assist the parties in reaching a voluntary resolution or narrowing of the matters in dispute.

56. **Formal Dispute Resolution**

a. **Statements of Position**. Respondent may initiate formal dispute resolution by submitting, within seven (7) days after the conclusion of informal dispute resolution under Paragraph 55, an initial Statement of Position regarding the matter in dispute. The EPA's responsive Statement of Position is due within twenty (20) days after receipt of the initial Statement of Position. All Statements of Position must include supporting factual data, analysis, opinion, and other documentation. If appropriate, EPA may extend the deadlines for filing statements of position for up to fifteen (15) days and may allow the submission of supplemental statements of position.

b. **Formal Decision**. The Director of the Superfund and Emergency Management Division, EPA Region 6, will issue a formal decision resolving the dispute ("Formal Decision") based on the statements of position and any replies and supplemental statements of position. The Formal Decision is binding on Respondent, and shall be incorporated into and become an enforceable part of this Settlement.

57. **Escrow Account**. For disputes regarding a Future Response Cost billing, Respondent shall: (a) establish, in a duly chartered bank or trust company, an interest-bearing escrow account that is insured by the Federal Deposit Insurance Corporation ("FDIC"); (b) remit to that escrow account funds equal to the amount of the contested Future Response Costs; and (c) send to EPA a copy of the transmittal letter and check paying the uncontested Future Response Costs, and a copy of the correspondence that established and funded the escrow account, including the name of the bank, the bank account number, and a bank statement showing the initial balance in the account. EPA may, in its unreviewable discretion, waive the requirement to establish the escrow account. Respondent shall cause the escrow agent to pay the amounts due to EPA under Paragraph 47, if any, by the deadline for such payment in Paragraph 47. Respondent is responsible for any balance due under Paragraph 47 after the payment by the escrow agent.

58. The initiation of dispute resolution procedures under this Section does not extend, postpone, or affect in any way any requirement of this Settlement, except as EPA agrees. Stipulated penalties with respect to the disputed matter will continue to accrue, but payment is stayed pending resolution of the dispute, as provided in Paragraph 61.

XV. STIPULATED PENALTIES

59. Unless the noncompliance is excused under Section XIII (Force Majeure), Respondent is liable to EPA for the following stipulated penalties:

a. for any failure: (1) to pay any amount due under Section XII; (2) [to establish and maintain financial assurance in accordance with Section X; (3) [to establish any escrow account required under Paragraph 57; (4) to submit timely or adequate deliverables, including the Removal Work Plan,

Site Health and Safety Plan, the Quality Assurance Project Plan, the Field Sampling and Data Analysis Plan, Progress Reports and Final Removal Report:

Penalty Per Violation Per Day	Period of Noncompliance
$1,500	1st through 14th day
$2,500	15th through 30th day
$3,500	31st day and beyond

b. for any failure to submit timely or adequate deliverables required by this Settlement other than those specified in Paragraph 59.a:

Penalty Per Violation Per Day	Period of Noncompliance
$750	1st through 14th day
$1,250	15th through 30th day
$1,750	31st day and beyond

60. **Work Takeover Penalty**. If EPA commences a Work Takeover under Paragraph 31, Respondent is liable for a stipulated penalty in the amount of $320,000. This stipulated penalty is in addition to the remedy available to EPA under Paragraph 41 (Access to Financial Assurance).

61. **Accrual of Penalties**. Stipulated penalties accrue from the date performance is due, or the day a noncompliance occurs, whichever is applicable, until the date the requirement is completed or the final day of the correction of the noncompliance. Nothing in this Settlement prevents the simultaneous accrual of separate penalties for separate non-compliances with this Settlement. Stipulated penalties accrue regardless of whether Respondent has been notified of their noncompliance, and regardless of whether Respondent has initiated dispute resolution under Section XIV, provided, however, that no penalties will accrue as follows:

a. With respect to a submission that EPA subsequently determines is deficient, during the period, if any, beginning on the 31st day after EPA's receipt of such submission until the date that EPA notifies Respondent of any deficiency; or

b. With respect to a matter that is the subject of dispute resolution under Section XIV, during the period, if any, beginning on the 21st day after EPA's Statement of Position is received until the date of the Formal Decision under Paragraph 56.b.

62. **Demand and Payment of Stipulated Penalties**. EPA may send Respondent a demand for stipulated penalties. The demand will include a description of the noncompliance and will specify the amount of the stipulated penalties owed. Respondent may initiate dispute resolution under Section XIV within 30 days after receipt of the demand. Respondent shall pay the amount demanded or, if Respondent initiates dispute resolution, the uncontested portion of the amount demanded, within thirty (30) days after receipt of the demand. Respondent shall pay the contested portion of the penalties determined to be owed, if any, within 30 days after the resolution of the dispute. Each payment for: (a) the uncontested penalty demand or uncontested portion, if late, and; (b) the contested portion of the penalty demand determined to be owed, if any, must include an additional amount for Interest accrued

from the date of receipt of the demand through the date of payment. Respondent shall make payment at https://www.pay.gov using the link for "EPA Miscellaneous Payments Cincinnati Finance Center," including references to the Site Name, Docket Number, and Site/Spill ID number and the purpose of the payment. Respondent shall send notices of this payment to EPA. The payment of stipulated penalties and Interest, if any, does not alter any obligation by Respondent under the Settlement.

63. Nothing in this Settlement limits the authority of the EPA to seek any other remedies or sanctions available by virtue of Respondent's non-compliances with this Settlement or of the statutes and regulations upon which it is based, including penalties under section 122(l) of CERCLA, and punitive damages pursuant to section 107(c)(3), provided, however, that the EPA may not seek civil penalties under section 122(l) of CERCLA for any noncompliance for which a stipulated penalty is provided for in this Settlement, except in the case of a willful noncompliance with this Settlement or in the event that EPA assumes performance of a portion or all of the Work pursuant to Paragraph 31 (Work Takeover).

64. Notwithstanding any other provision of this Section, the EPA may, in its unreviewable discretion, waive any portion of stipulated penalties that have accrued under this Settlement.

XVI. COVENANTS BY EPA

65. **Covenants for Respondent**. Subject to Paragraph 67 ("General Reservations"), EPA covenants not to sue or to take administrative action against Respondent under section 107(a) of CERCLA regarding the Work and Future Response Costs.

66. The covenants under Paragraph 65: (a) take effect upon the Effective Date; (b) are conditioned on the complete and satisfactory performance by Respondent of the requirements of this Settlement; (c) extend to the successors of Respondent but only to the extent that the alleged liability of the successor of the Respondent is based solely on its status as a successor of the Respondent; and (d) do not extend to any other person.

67. **General Reservations**. Notwithstanding any other provision of this Settlement EPA reserves, and this Settlement is without prejudice to, all rights against Respondent regarding the following:

a. Liability for failure by Respondent to meet a requirement of this Settlement;

b. Liability for performance of response action other than the Work;

c. Liability for damages for injury to, destruction of, or loss of natural resources, and for the costs of any natural resource damage assessments;

d. Liability arising from the past, present, or future disposal, release or threat of release of Waste Materials outside of the Site; and

e. Criminal liability.

68. Subject to Paragraph 65, nothing in this Settlement limits any authority of EPA to take, direct, or order all appropriate action to protect human health and the environment or to prevent, abate, respond to, or minimize an actual or threatened release of Waste Material on, at, or from the Site, or to request a Court to order such action.

XVII. COVENANTS BY RESPONDENT

69. **Covenants by Respondent**

a. Subject to Paragraph 70, Respondent covenants not to sue and shall not assert any claim or cause of action against the United States under CERCLA, section 7002(a) of RCRA, the United States Constitution, the Tucker Act, 28 U.S.C. § 1491, the Equal Access to Justice Act, 28 U.S.C. § 2412, the State Constitution, State law, or at common law, regarding the Work, Future Response Costs, and this Settlement.

b. Subject to Paragraph 70, Respondent covenants not to seek reimbursement from the Fund through CERCLA or any other law for costs of the Work, Future Response Costs, or any claim arising out of response actions at or in connection with the Site.

70. **Respondent's Reservation**. The covenants in Paragraph 69 do not apply to any claim or cause of action brought, or order issued, after the Effective Date by the United States to the extent such claim, cause of action, or order is within the scope of a reservation under Paragraphs 67.a through 67.e.

a. Respondent reserves any right it may have to oppose or defend against any claim or cause of action brought, or order issued by EPA or the United States pursuant to Paragraphs 67.a through 67.e.

71. Respondent agrees not to seek judicial review of the final rule listing the Site on the NPL based on a claim that changed site conditions that resulted from the performance of the Work in any way affected the basis for listing the Site.

XVIII. EFFECT OF SETTLEMENT; CONTRIBUTION

72. The Parties agree that: (a) this Settlement constitutes an administrative settlement under which Respondent has, as of the Effective Date, resolved its liability to EPA within the meaning of sections 113(f)(2), 113(f)(3)(B), and 122(h)(4) of CERCLA; and (b) Respondent is entitled, as of the Effective Date, to protection from contribution actions or claims as provided by sections 113(f)(2) and 122(h)(4) of CERCLA, or as may be otherwise provided by law, for the "matters addressed" in this Settlement. The "matters addressed" in this Settlement are the Work, and Future Response Costs, provided, however, that if EPA exercises rights against Settling Respondent under the reservations in Paragraphs 67.a through 67.e, the "matters addressed" in this Settlement will no longer include those response costs or response actions that are within the scope of the exercised reservation.

73. Respondent shall, with respect to any suit or claim brought by it for matters related to this Settlement, notify EPA no later than sixty (60) days prior to the initiation of such suit or claim. Respondent shall, with respect to any suit or claim brought against it for matters related to this Settlement, notify EPA within ten (10) days after service of the complaint on such Respondent. In addition, Respondent shall notify EPA within ten (10) days after service or receipt of any Motion for Summary Judgment and within ten (10) days after receipt of any order from a court setting a case for trial, for matters related to this Settlement.

74. **Res Judicata and Other Defenses**. In any subsequent administrative or judicial proceeding initiated against Respondent by EPA or by the United States on behalf of EPA for injunctive relief, recovery of response costs, or other appropriate relief relating to the Site, Respondent shall not

assert, and may not maintain, any defense or claim based upon the principles of waiver, claim preclusion (res judicata), issue preclusion (collateral estoppel), claim-splitting, or other defenses based upon any contention that the claims raised by the United States in the subsequent proceeding were or should have been brought in the instant case, provided however, that nothing in this Paragraph affects the enforceability of the covenants by EPA set forth in Section XVI (Covenants By EPA).

75. Nothing in this Settlement creates any rights in, or grants any defense or cause of action to, any person not a Party to this Settlement. Except as provided in Section XVII (Covenants by Respondent), each of the Parties expressly reserves any and all rights (including pursuant to section 113 of CERCLA), defenses, claims, demands, and causes of action that each Party may have with respect to any matter, transaction, or occurrence relating in any way to the Site against any person not a Party hereto. Nothing in this Settlement diminishes the right of the United States under section 113(f)(2) and (3) of CERCLA to pursue any person not a party to this Settlement to obtain additional response costs or response action and to enter into settlements that give rise to contribution protection pursuant to section 113(f)(2).

XIX. RECORDS

76. **Respondent's Certification**. Respondent certifies that: (a) it has implemented a litigation hold on documents and electronically stored information relating to the Site, including information relating to its potential liability under CERCLA regarding the Site, since the notification of potential liability by the United States or the State; and (b) it has fully complied with any and all EPA requests for information under sections 104(e) and 122(e) of CERCLA, and section 3007 of RCRA.

77. **Retention of Records and Information**

a. Respondent shall retain, and instruct their contractors and agents to retain, the following documents and electronically stored data ("Records") until ten (10) years after the Notice of Completion of the Work under Paragraph 29.a ("Record Retention Period"):

(1) All records regarding Respondent's liability and the liability of any other person under CERCLA regarding the Site;

(2) All reports, plans, permits, and documents submitted to EPA in accordance with this Settlement, including all underlying research and data; and

(3) All data developed by, or on behalf of, Respondent in the course of performing the Work.

b. At the end of the Record Retention Period, Respondent shall notify EPA and TCEQ that it has ninety (90) days to request the Respondent's Records subject to this Section. Respondent shall retain and preserve their Records subject to this Section until ninety (90) days after EPA's and TCEQ's receipt of the notice. These record retention requirements apply regardless of any corporate record retention policy.

78. Respondent shall provide to EPA and TCEQ, upon request, copies of all Records and information required to be retained under this Section. Respondent shall also make available to EPA, for purposes of investigation, information gathering, or testimony, their employees, agents, or representatives with knowledge of relevant facts concerning the performance of the Work.

79. **Privileged and Protected Claims**

a. Respondent may assert that all or part of a record requested by EPA is privileged or protected as provided under federal law, in lieu of providing the record, provided that Respondent complies with Paragraph 79.b, and except as provided in Paragraph 79.c.

b. If Respondent asserts a claim of privilege or protection, Respondent shall provide EPA with the following information regarding such record: its title; its date; the name, title, affiliation (e.g., company or firm), and address of the author, of each addressee, and of each recipient; a description of the record's contents; and the privilege or protection asserted. If a claim of privilege or protection applies only to a portion of a record, Respondent shall provide the record to EPA in redacted form to mask the privileged or protected portion only. Respondent shall retain all records that Respondent claims to be privileged or protected until EPA has had a reasonable opportunity to dispute the privilege or protection claim and any such dispute has been resolved in Respondent's favor.

c. Respondent shall not make any claim of privilege or protection regarding: (1) any data regarding the Site, including all sampling, analytical, monitoring, hydrogeologic, scientific, chemical, radiological or engineering data, or the portion of any other record that evidence conditions at or around the Site; or (2) the portion of any record that Respondent is required to create or generate in accordance with this Settlement.

80. **Confidential Business Information Claims**. Respondent is entitled to claim that all or part of a record submitted to EPA under this Section is Confidential Business Information ("CBI") that is covered by section 104(e)(7) of CERCLA and 40 C.F.R. § 2.203(b). Respondent shall segregate all records or parts thereof submitted under this Settlement which Respondent claims is CBI and label them as "claimed as confidential business information" or "claimed as CBI." Records that Respondent properly labels in accordance with the preceding sentence will be afforded the protections specified in 40 C.F.R. part 2, subpart B. If the records are not properly labeled when they are submitted to EPA, or if EPA notifies the submitter that the records are not entitled to confidential treatment under the standards of section 104(e)(7) of CERCLA or 40 C.F.R. part 2, subpart B, the public may be given access to such records without further notice to the Respondent.

81. Notwithstanding any provision of this Settlement, EPA retains all of its information gathering and inspection authorities and rights, including enforcement actions related thereto, under CERCLA, RCRA, and any other applicable statutes or regulations.

XX. NOTICES AND SUBMISSIONS

82. All agreements, approvals, consents, deliverables, modifications, notices, notifications, objections, proposals, reports, waivers, and requests specified in this Settlement must be in writing unless otherwise specified. Whenever a notice is required to be given or a report or other document is required to be sent by one Party to another under this Settlement, it must be sent as specified below. All notices under this Section are effective upon receipt, unless otherwise specified. In the case of emailed notices, there is a rebuttable presumption that such notices are received on the same day that they are sent. Any Party may change the method, person, or address applicable to it by providing notice of such change to all Parties.

As to EPA: via email to:

Casey Luckett Snyder, Remedial Project Manager
Re: Site/Spill ID # A6VQ
Luckett.casey@epa.gov

As to
Respondent: via email to:

Kevin Peterburs (kjpeterb@up.com)
Project Coordinator
And
Nicholas Bryan (njbryan@up.com)
UPRR Senior General Attorney, Environmental

XXI. APPENDICES

83. The following appendices are attached to and incorporated into this Settlement:

a. "Appendix A" is the name of Settling Respondent.

b. "Appendix B" is the map of the Site.

c. "Appendix C" is the Statement of Work.

XXII. MODIFICATION

84. The RPM may modify any plan or schedule, or SOW in writing or by oral direction concerning the Work provided in Section VIII (Work to be Performed). Any oral modification will be memorialized in writing by EPA promptly, but shall have as its effective date the date of the RPM's oral direction. Any other requirements of this Settlement may be modified in writing by mutual agreement of the parties.

85. If Respondent seeks permission to deviate from any approved Removal Work Plan or schedule or SOW, Respondent's Project Coordinator shall submit a written request to EPA for approval outlining the proposed modification and its basis. Respondent may not proceed with the requested deviation until receiving oral or written approval from the RPM pursuant to Paragraph 84.

86. No informal advice, guidance, suggestion, or comment by the RPM or other EPA representatives regarding any deliverable submitted by Respondent shall relieve Respondent of its obligation to obtain any formal approval required by this Settlement, or to comply with all requirements of this Settlement, unless it is formally modified.

XXIII. SIGNATORIES

87. The undersigned representative of EPA and each undersigned representative of a Respondent certifies that he or she is fully authorized to enter into the terms and conditions of this Settlement and to execute and legally bind such party to this Settlement.

XXIV. INTEGRATION

88. This Settlement constitutes the entire agreement among the Parties regarding the subject matter of the Settlement and supersedes all prior representations, agreements and understandings, whether oral or written, regarding the subject matter of the Settlement.

XXV. EFFECTIVE DATE

89. This Settlement is effective when EPA issues notice to the Respondent that the EPA Region 6 Director, Superfund and Emergency Management Division, has signed the Settlement.

IT IS SO AGREED AND ORDERED:

U.S. ENVIRONMENTAL PROTECTION AGENCY:

LISA PRICE Digitally signed by LISA PRICE Date: 2023.02.24 16:38:24 -06'00' for

_____ _____

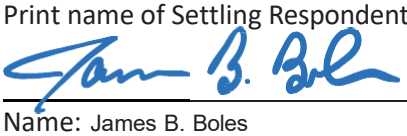
Dated

John Meyer, Acting Director
Superfund and Emergency Management Division
EPA Region 6

Signature Page for Settlement Regarding a Removal Site Evaluation, Union Pacific Railroad Company's Houston Wood Preserving Works Site, 4910 Liberty Road, Houston, Harris County, Texas

FOR: Union Pacific Railroad Company

Print name of Settling Respondent



February 20, 2023

Date

Name: James B. Boles

Title: Vice President - Law

Company: Union Pacific Railroad Company

Address: 1400 Douglas Street
MS 1580
Omaha, Nebraska
68179

Appendix A

Settling Respondent - Union Pacific Railroad Company

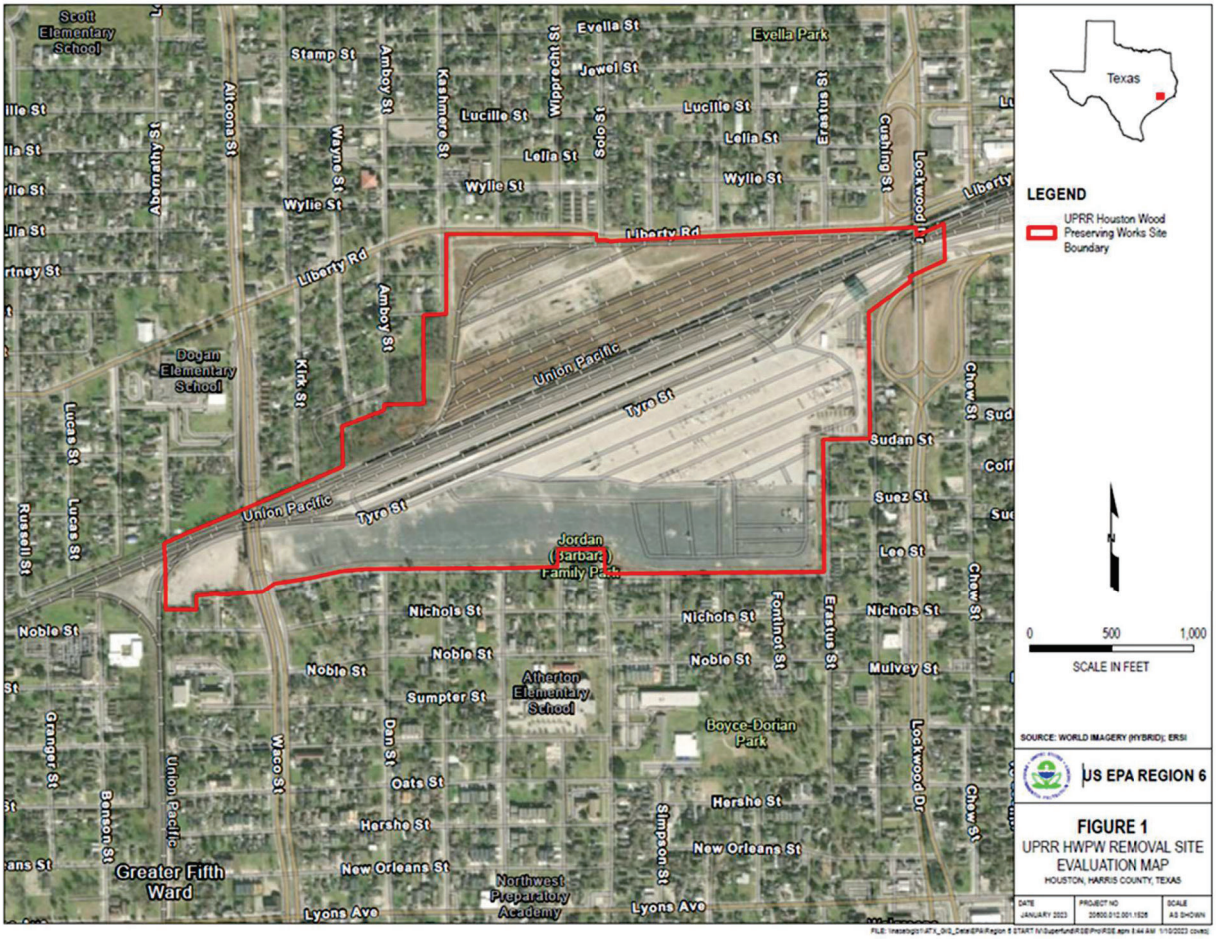
Mr. Lance Fritz
Chairman, President, and Chief Executive Officer
Union Pacific Railroad Company
1400 Douglas Street
Omaha, Nebraska 68179

Settling Respondent - Legal Representative

Ms. Molly Cagle, Esq.
Baker Botts L.L.P.
401 S. 1st St., Suite 1300
Austin, Texas 78704

Appendix B

Site Map



Appendix C

EPA Region 6 Statement of Work